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## **Critical Analysis of Saraswat Co-operative Bank Limited (Scheduled Bank) by CAMEL Model**

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### **Abstract**

Urban Co-operative Bank is one of the vital segments in Indian banking system. They essentially cater to the credit needs of persons of small means. It is imperative to carefully evaluate and analysis the financial soundness of urban bank. Financial soundness of a bank is the guarantee not only for its depositors but equal important for shareholders, employees and whole financial system also. In this paper, an effort has been made to critical analysis of Saraswat Co-operative Bank Ltd. using CAMEL Modal for five year period from 2011-12 to 2015-16. Management of Saraswat Co-operative Bank Ltd. succeeds to maintain Capital to Risk-weighted Assets Ratio (CRAR) and Credit Deposit Ratio (CD Ratio) as per prescribed norms of RBI. Net Interest Margin Ratio of SCB limited was not as per standard, so it is need to improvement in Net Interest Margin Ratio. On the basis of the study, it can conclude that, financial soundness & overall performance of The Saraswat Co-operative Bank Ltd. was satisfactory during the study period.

**Keywords:** The Saraswat Co-operative Bank Limited, UCBs, Reserve Bank of India, CAMEL, Financial Soundness

### **Introduction**

Banking sector plays an influential role in the economic development of a country. The banking sector reforms in India were started as a follow up measure of economic liberalization, globalization & financial sector reforms in the country. The banking sector being the backbone of the economy was treated with utmost importance in the financial sector reforms. The reforms were aimed at to make the Indian banking industry more competitive, productive & efficient and to follow international accounting standard. The reforms in the banking industry started in the early 1990s have been continued till now and the Indian banking industry registered tremendous growth in the post liberalization era. Since the beginning of 1991, there have been considerable changes in the rules and regulation, organization, scope and activity level of Indian Banking sector.

A resilient and vibrant banking system is very crucial for sound and accelerated economic growth." For this reason it can be said that, the growth of the economy depend on financial soundness of banking sector. Supervision of banking unit can help to make them financially sound. CAMEL model of rating was first developed in the 1970s by the three federal banking supervisors of the U.S (the Federal Reserve, the FDIC and the OCC) as part of the regulators" "Uniform Financial Institutions Rating System", to provide a convenient summary of bank condition at the time of its on-site examination. The banks were judged on five different components under the acronym CAMEL, reflecting five assessment areas are Capital adequacy, Asset quality, Management efficiency, Earning quality and Liquidity. In 1995 the Federal Reserve and the OCC (The office of the Comptroller of the Currency) replied CAMEL with CAMELS, adding the "S" which stands for financial sensitivity. RBI moved to CAMELS pattern of rating of Urban Co-operative Bank with effect from March 31, 2011 in lieu of earlier system of grading.

Urban co-operative bank is one of the vital segments in Indian banking system. They essentially cater to the credit needs of persons of small means. The Saraswat Bank Ltd. is the largest Co-operative Bank in the country. Since its inception in 1918, it has grown to be the pioneer in the urban co-operative banking sector in India.

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In the 99 fruitful years of its existence, it has soared above its peers to achieve a total business of `51,861.95 Crore comprising deposits of `31,495.84 Crore and advances of `20,366.11 Crore as on 31<sup>st</sup> March, 2016. The Bank is the first co-operative bank in the country to receive Pan-India permission from the Reserve Bank of India for branch operations and is presently operating in six states viz. Maharashtra, Goa, Gujarat, Delhi, Madhya Pradesh and Karnataka. Driven by technology and inspired by tradition, the Bank has matched strides with India’s digital revolution through a varied range of user-friendly technological products like mobile banking, internet banking, international VISA EMV and RuPay chip cards, etc. At the same time, through special attention to personalized service, the Bank has also maintained its personal touch with customers and welcomes them to visit the Bank’s branches too. Agility of the small bank with ability of the large bank has been Saraswat Bank's enduring buzzword. No study has so far been made to study the financial soundness of Saraswat Co-operative Bank by CAMEL modal. Against this backdrop in this paper is an attempt to critical analysis of Saraswat Urban Co-operative Bank by a CAMEL Model. The remainder of our article is organized as follows: Section II provides the review of related literature. Section III describes the methodology & data used for empirical analysis. Section IV offers data analysis and interpretation of the study and Conclusion in section V.

**Section II  
Literature Review**

A study done by analysed that “CAMEL rating criteria has become a concise and indispensable tool for examiners and regulators”. This rating criterion ensures a bank’s healthy conditions by reviewing different aspects of a bank based on variety of information sources such as financial statement, funding sources, macroeconomic data, budget and cash flow.

Prasuna (2003) [8] concluded the performance of 65 Indian banks according to the CAMEL Model and examined that better service quality, innovative products and better bargains were beneficial because of the prevailing tough competition.

Bodla and Verma (2006) [9] investigated the performance of SBI and ICICI through CAMEL model for the period of 2000-01 to 2004-05. With the reference to the Capital Adequacy, it concluded that SBI has an advantage over ICICI. Regarding to assets quality, earning quality and management quality, they inferred that ICICI has an edge upon SBI.

Dr. Mohi-ud-Din Sangmi & Dr. Tabassum Nazir (2010) [5] conducted a study to evaluate the financial performance of Punjab national Bank and Jammu and Kashmir Bank in the northern India. The results highlighted that the position of the banks under study is sound and satisfactory as far as their capital adequacy, asset quality management capability and liquidity is concerned.

Mishra, A. K., Harsha G., Anand S. and Dhruva N. R. (2012) [10], investigated the performance of 12 public & private sector banks over a period of twelve years for which CAMEL rating was used. In their study individual parameter of CAMEL were ranked for Indian Banks and final composite rank was computed taking average ranks of all five parameters of CAMEL and they concluded that private banks were performing better than public sector banks for the period ranging from 2000 to 2011.

Trivedi R. Krupa (2013) [1], evaluated the financial performance of the only scheduled Urban Co-operative Bank in Surat City namely Surat People Co-operative Bank using a CAMEL model. In his study data of 10 years were analyzed by calculating 28 ratios related to CAMEL Model. He found that overall state of capital adequacy of SPCB was satisfactory. Overall earning capacity of the bank was not bad but the overall state of liquidity was below satisfactory and needed to improve.

Measured the financial soundness of all the 26 Public Sector Banks in India for the period of five years and used CAMEL rating approach. She concluded that the banks with least ranking need to improve their performance to come up to the desired standards.

Did a study to analyze the financial position and performance of the Axis and Kotak Mahindra Bank in India. The CAMELS analysis and t-test concluded that there is no significance difference between the Axis and Kotak Mahindra bank's financial performance but the Kotak Mahindra bank performance is slightly less compared with Axis Bank.

Examined the financial strength of public & private sector banks in India by adopting the CAMEL Model. The performance of selected 6 banks was studied for the period 2010-2013. The author concluded that private sector banks were growing at a faster pace than public sector banks.

**Section III  
Research Methodology**

To look at the financial soundness of the selected The Saraswat Co-operative Bank in India; we use a very simplified approach using internationally accepted CAMEL rating parameters. CAMEL is an acronym for five parameters (capital adequacy, assets quality, management efficiency, earnings quality and liquidity). CAMEL rating is a subjective model which indicates financial strength & weakness of a bank.

The study is mainly based on secondary data drawn from the annual reports of the respective bank. This data is related to 5 years (2010-11 to 2015-16). For analysis of the data, three important statistical tools viz. mean, standard deviation and Coefficient of Variation has been used to arrive at conclusions in a scientific way. For the purpose of study CAMEL model financial ratios are divided into the following categories.

The model of CAMEL in this study is shown				
	Group	Ratio	Formula	Important
C	Capital Adequacy	CRAR	(Net Capital Funds/Risk Weighted Assets) x 100	The dimension of capital adequacy is an important factor to help the bank in understanding the shock attractive capability during risk.
		Debt Equity Ratio	(Capital + Reserves) / (Deposits + Borrowing + Other liabilities)	
		Coverage Ratio	[(Net Worth - Net NPA) / Total Assets]*100	

A	Assets Quality	Net NPAs to Net Advances Ratio	$(\text{Net NPAs} / \text{Net Advances}) * 100$	The dimension of asset quality is an important factor to help the bank in understanding the risk on the exposure of the debtors.
		Government Sec. to Investment Ratio	$(\text{Government Securities} / \text{Total Investments}) * 100$	
		Standard Advances to Total Advances Ratio	$[\text{Standard Advances} (\text{Total Advances} - \text{Gross NPAs}) / \text{Total Advances}] * 100$	
M	Management Efficiency	Credit Deposit Ratio	$(\text{Total Advances} / \text{Total Deposits}) * 100$	Management quality reflects the management soundness of a bank. The management acts as a safeguard to operate the bank in a smooth and decent manner and is called excellence management or skillful management, whenever it controls its cost and increases productivity, ultimately achieving higher profits.
		Business per Employee Ratio	$(\text{Total Advances Plus Total Deposits}) / \text{No. of Employees}$	
		Profit per Employee Ratio	$\text{profit} / \text{Number of Employees}$	
E	Earning Quality	Return on Average Assets Ratio (ROA)	$(\text{Net profit after Tax} / \text{Average Assets}) * 100$	Earning is an important parameter to measure the financial performance of an organization. Earning quality mainly measures the profitability and productivity of the bank, explains the growth and sustainability of future earnings capacity.
		Net Interest Margin Ratio	$[(\text{Interest Income Earned} - \text{Interest Expended}) / \text{Average Invested Assets}] * 100$	
		Return on Equity Ratio (ROE)	$(\text{Net Profit after Tax} / \text{Share Capital}) * 100$	
L	Liquidity	Cash Assets to Total Assets Ratio	$(\text{Cash Assets} / \text{Total Assets}) * 100$	Liquidity ratio in a bank measures the ability to pay its current obligations. For having sound banking operations it needs to have liquidity solvency. If any bank faces liquidity crisis, bank can't meet up its short-term obligations. Liquidity crisis seems to be a curse to the image of banks. So it is a prime concern to banks. Cash and investments are the most liquid assets of a bank.
		Government Securities to Total Assets Ratio	$(\text{Government Securities} / \text{Total Assets Ratio}) * 100$	
		Total Investment to Total Assets Ratio	$(\text{Total Investment} / \text{Total Assets Ratio}) * 100$	

**Objective of Study**

The main objective of the study is to analyze the financial position and performance of The Saraswat Co-operative Bank Ltd. using CAMEL model.

**Limitation of the Study**

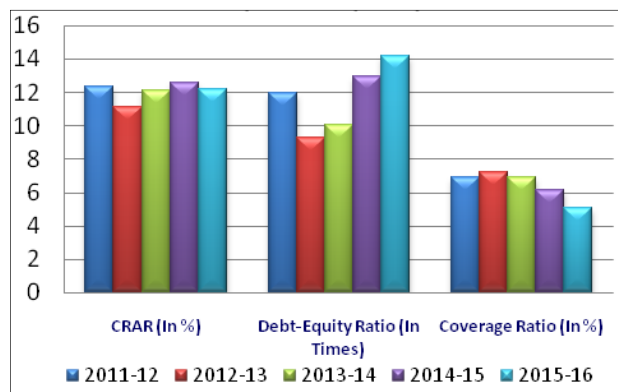
The study suffers from the inherent limitations of the financial statements and techniques of analysis like ratio analysis and trend analysis.

**Section IV Data Analysis and Interpretation**

**Capital Adequacy**

Capital adequacy is a reflection of the inner strength of a bank, which would stand it in good stead during the times of crisis. It is very useful for a bank to conserve & protect stakeholders' confidence and preventing the bank from being bankrupt. It reflects whether the bank has enough capital to bear unexpected losses arising in the future.

Reserve Bank of India prescribed banks to maintain a minimum Capital to risk-weighted Assets Ratio (CRAR) of 9% with regard to credit risk, market risk and operational risk on an ongoing basis, but as concern to latest criteria i.e. minimum 12 percent for second schedule Urban Co-operative Bank. For the study CRAR, Debt to Equity Ratio & Coverage Ratio has been used to measure capital adequacy.



**Chart 1:** Capital Adequacy of SCB Ltd.

The table & chart no. 01 indicates that, fluctuating trend was seen in Capital to Risk-weighted Assets Ratio (CRAR) of SCB Ltd during the study period. It was decreased from 12.37 percent in 2011-12 to 12.15% in 2015-16. On an average, CRAR Ratio was 12.07 percent which was a little point more than prescribed norms (Minimum 12 percent) of RBI.

The Debt-Equity Ratio is total outside liability to shareholders funds. It was although the declined by 2.70 times in 2012-13, but overall performance of SCB Ltd. had increased from 11.98 percent in 2011-12 to 14.16 times in 2015-16. However, the mean value of the Debt-Equity ratio was 11.68 times.

Above table & graph also show that, the Coverage Ratio of SCB Ltd., this ratio indicates availability of capital to meet any incidence of loss of assets in NPAs. Coverage Ratio of SCB Ltd. was decreased from 6.94 percent in 2011-12 to 5.10 percent in 2015-16. Mean of Coverage Ratio was 6.46 percent during the study period.

**Table 1:** Capital Adequacy of SCB Ltd.

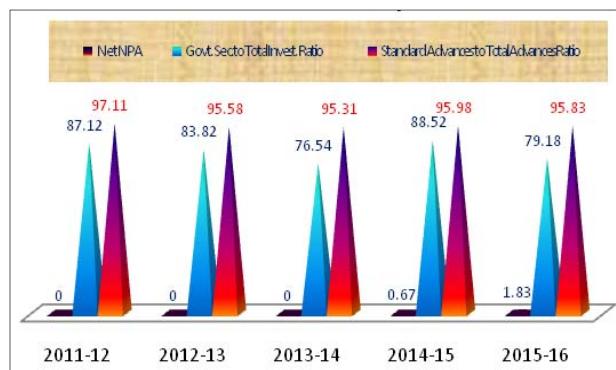
Year	CRAR (In %)	Debt to Equity Ratio (In Times)	Coverage Ratio (In %)
2011-12	12.37	11.98	6.94
2012-13	11.15	9.28	7.21
2013-14	12.11	10.04	6.91
2014-15	12.57	12.96	6.12
2015-16	12.15	14.16	5.10
Mean	12.07	11.68	6.46

**Assets Quality**

Financial Institution assets quality is indicator of healthiness against loss of value in assets as assets impairment risks the solvency of the financial institution. The weakening value of assets has a spillover effect, as losses are eventually written-off against capital, which eventually expose the earning capacity of the institution. With this framework, the asset quality is evaluated with respect to the level and asperity of non-performing assets, adequacy of provisions, distribution of assets etc. The following three ratios (Net NPAs, Government Security to Total Investment Ratio & Standard Advances to Total Advances Ratio) have been taken into consideration to judge the assets quality of the SCB Ltd.

**Table 2:** Assets Quality of SCB Ltd. (Figure in %)

Year	Net NPAs	Govt. Sec. to Total Investments Ratio	Standard Advances to Total Advances Ratio
2011-12	0	87.12	97.11
2012-13	0	83.82	95.58
2013-14	0	76.54	95.31
2014-15	0.67	88.52	95.98
2015-16	1.83	79.18	95.83
Mean	0.50	83.04	95.96
S.D.	0.80	5.11	0.69
C.V.	159.62	6.15	0.72



**Chart 2:** Assets Quality of SCB Ltd.

The table & Chart no 02 reveals that, the Assets Quality position of SCB Ltd. during the study period. The Net NPAs Ratio was Zero percent in 2011-12 which increased to 1.83 percent in year 2015-16, accretion in Net NPAs Ratio is not good sign for any banking institution. Net NPAs not more than 3 percent is criteria for Financial Sound & Well Managed (FSWM) Primary Co-operative Bank, as per circular (circular UBD No. BPD 3/16.05.00/2004-05 dated July 13, 2004) of Reserve Bank of India. Mean of Net NPAs Ratio of SCB Ltd. was 0.50 percent during the study period, its shows that bank management succeed to maintain Net NPAs ratio with in regulatory criteria. Government Securities to Total Investment Ratio of SCB Ltd. was show fluctuating trend during the study period, but as per coefficient of variation (i.e. 6.15 percent) this fluctuation was not so far. Mean of Standard Advances to Total Advances Ratio reveals that, 95.96 percent Asset of SCB Ltd. was high performing.

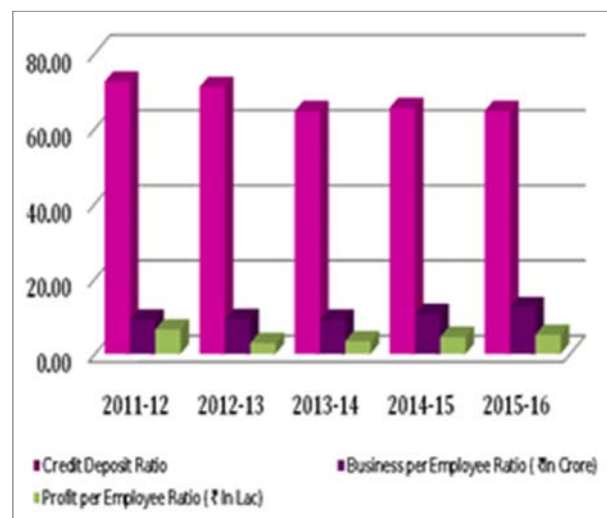
**Management Efficiency**

Management efficiency is another essential component of the CAMEL model, means adherence to set norms, knack to plan, organization culture & be proactive in the dynamic

environment, leadership, innovativeness and administrative competence of the bank. Effective management is one of the crucial factors behind any institution’s performance. To analysis the management efficiency affecting the financial ability of the Bank, the following three ratios (Credit-Deposit Ratio, Business per Employee Ratio & Profit per Employee Ratio) are calculated for testing of management efficiency.

**Table 3:** Management Quality of SCB Ltd.

Year	Credit Deposit Ratio (in %)	Business per Employee Ratio(In Crore)	Profit per Employee Ratio (In Lac)
2011-12	72.47	9.12	6.47
2012-13	71.05	9.26	2.87
2013-14	64.62	9.06	3.38
2014-15	65.50	10.60	4.48
2015-16	64.66	12.39	5.05
Mean	67.66	10.09	4.45



**Chart 3:** Management Quality of SCB Ltd.

Above table & chart indicate the Management Ability of The Saraswat Co-operative Bank Ltd. during the study period. On an average Credit Deposit Ratio of SCB LTD. was 67.66 percent, which was in standard limit of 65 percent to 70 percent. It varied over range between 64.62 percent minimum in 2013-14 to 72.47 percent maximum in 2011-12.

The Business per Employee Ratio of SCB Ltd. was, on an average ` 10.09 Crore during the study period. It was increased continuously except 2013-14. Profit Earning per Employee Ratio indicates the average profit generated per person employed by a bank. This ratio showed fluctuating trend throughout the study period. The average earning per employee ratio was ` 4.45 Lac.

**Earning Quality**

The quality of earnings is a very important criterion which represents the sustainability, bank’s profitability & its capability to maintain quality and growth of future earnings. Earnings and profitability are examined as against interest rate policies and adequacy of provisions. For the study, the following ratios (Return on Assets, Net Interest Margin Ratio & Return on Equity) have been used to measure earnings quality of SCB Ltd.

**Table 4:** Earning Quality of SCB Ltd.

Year	Return on Average Assets (ROA) (Figure in %)	Net Interest Margin Ratio (Figure in %)	Return on Equity Ratio (ROE) (Figure in %)
2011-12	1.12	3.47	201.48
2012-13	0.46	3.30	88.32
2013-14	0.55	2.79	87.72
2014-15	0.61	2.30	100.46
2015-16	0.62	2.41	104.16
Mean	0.67	2.85	116.43

Above the table no. 04 reveals the earning quality of The Saraswat Co-operative Bank Ltd. from the year 2011-12 to 2015-16. Return on Assets Ratio is a key profitability ratio which measures bank's efficiency in using its assets to generate net income. Return on assets ratio showed fluctuating trend throughout the study period. It average was 0.67, which is 0.33 lower than the standard norms of 1 percent.

Net Interest Margin Ratio of SCB Ltd. decreased from 3.47 percent in the year 2011-12 to 2.41 percent in the year 2015-

16. It average was 2.85 percent which is 0.65 percent lower than the standard norms of 3.5 percent.

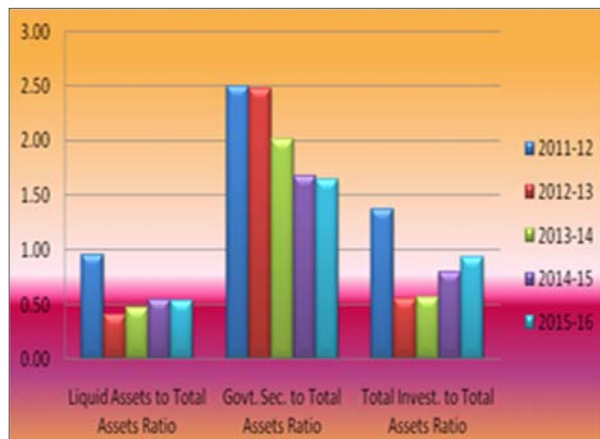
Return on Equity Ratio is a key profitability ratio for investors which measure the profitability of shareholders' investments. Return on equity ratio showed fluctuating trend throughout the study period. The average ROE ratio was 116.43 percent which is 7.76 times higher than the standard norms of 15 percent.

**Liquidity**

Liquidity is a conclusive aspect which reflects bank's ability to meet its financial obligations and to maintain adequate level of liquid assets, which will otherwise result in decline in the earnings. An adequate liquidity position can be obtained either by increasing liabilities or by converting its assets quickly into cash. Bank has to take proper measures to hedge the liquidity risk, at the same time securing good proportion of funds to be invested in high return generating securities. For the study Liquid Assets to Total Assets Ratio, Government Securities to Total Assets Ratio & Total Investment to Total Assets Ratio have been used to measure liquidity.

**Table No 05:** Liquidity of SCB Ltd. (Figure in %)

Year	Liquid Assets to Total Assets Ratio	Govt. Sec. to Total Assets Ratio	Total Invest. to Total Assets Ratio
2011-12	0.95	2.50	1.37
2012-13	0.41	2.48	0.56
2013-14	0.47	2.02	0.56
2014-15	0.55	1.68	0.80
2015-16	0.54	1.64	0.93
Mean	0.58	2.06	0.85



**Chart 5:** Liquidity of SCB Ltd.

Above the table & chart No. 05 depicts liquidity position of SCB Limited during the period. Liquid assets which consist of cash in hand, balance with other bank and money at call & short notice. Fluctuating trend was recorded in Liquid Assets to Total Assets Ratio of SCB Ltd. It varied a range between minimum 0.41 percent in the 2012-13 to maximum 0.95 percent in the year 2011-12. Government Securities to Total Assets Ratio measures the amount of risk free liquid assets invested by a bank in government securities as a percentage of the total assets held by the bank. Government security to Total Assets Ratio of SCB Ltd. was 2.50 percent in 2011-12 which decreased up to 1.64 percent in 2015-16. Total Investment to Total Assets Ratio fluctuated between 0.56 minimum to 1.37 percent maximum during the study

period. It average remained on 0.85% during the study period.

**Section - V  
Conclusion**

Economic growth of a country is depending on development of financial sector. In this connection, banking sector must be given priority to attain sustainability in the financial sector. So, the smooth and efficient operation of banking sector help to reduce the risk of failure of an economy, in that purpose central banks all around the world are continuously working on their supervision system. In evaluating the function of the banks, many of the developed and developing countries is now following uniform financial rating system (CAMEL RATING) along with other existing procedures and techniques.

Management of Saraswat Co-operative Bank Ltd. succeeds to maintain Capital to Risk-weighted Assets Ratio (CRAR) and Credit Deposit Ratio (CD Ratio) as per prescribed norms of RBI. Debt to Equity Ratio of SCB Ltd. was increased, it means growth of own funds was weak as compare to outside liability of bank. Business per Employee Ratio increased but same time profit per employee ratio was decreased during the study period. Non Performing Assets was as per limit of norms but increasing trend in NPAs and decreasing in Return on Assets Ratio are serious point for management of SCB Limited. It is need to improvement in Net Interest Margin Ratio. On the basis of the study, it can be conclude that, overall performance of The Saraswat Co-operative Bank Ltd. was satisfactory during the study period.

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